

## **ABSTRACT OF THE DISCLOSURE**

The invention relates to a process for treating an organic solution comprising cyclohexanone oxime, cyclohexanone and an organic solvent, said process comprising distilling the organic solution such as to obtain (i) a first product comprising organic solvent, (ii) a second product comprising cyclohexanone and (iii) a third product comprising cyclohexanone oxime; and feeding the second product to a cyclohexanone oxime synthesis zone in which hydroxylammonium is reacted with cyclohexanone to form cyclohexanone oxime.